

Proposed Late Night Service Pilot

Service Pilot Evaluation
Presented by MBTA

Fiscal Management and Control Board
October 30, 2017

Summary of New Service Pilot Policy

- Adopted by the FMCB on March 27, 2017
- Creates guidelines and process for considering and adopted new service pilots
- Pilots have to have limited capital costs, clear sponsor, and public support
- Policy lays out a set of metrics that the sponsors and MBTA will commit to before approval including
 - Ridership target
 - Projected subsidy per trip comparable to most similar existing service
 - Projected revenue
 - Capital costs
- All pilots must have performance measures and data collection plan

Overnight Proposal Timeline

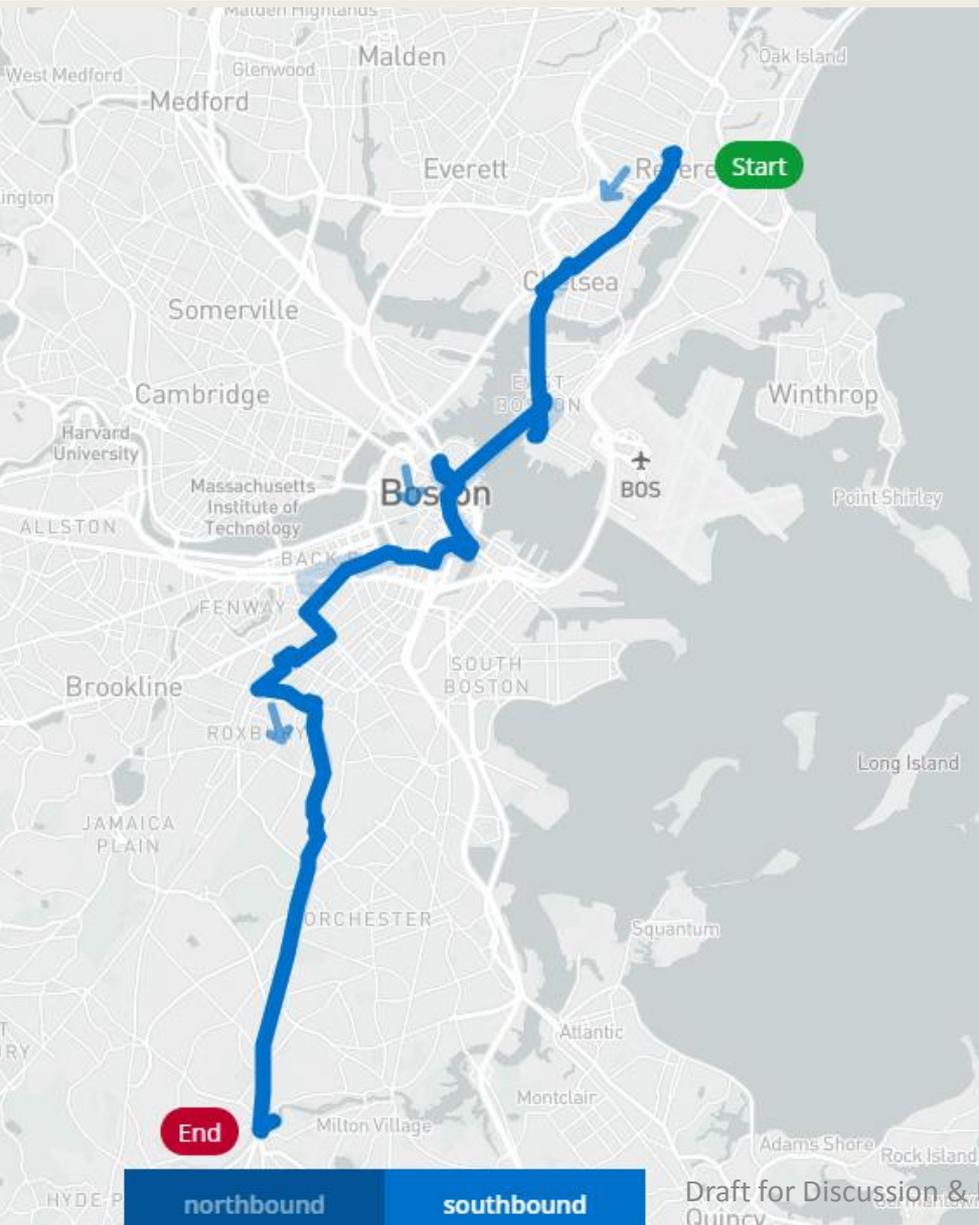
- March 2016: Advocate proposal for overnight bus service 7 days a week
- Summer 2016: MBTA staff and advocates discussed proposal
- Winter 2016: MBTA staff and advocates/cities collected and analyzed data on travel demand during the 1-5 am time period
- February 2017: Data presented and Board gives requirements for service
- March 2017: Pilot Policy adopted and sponsors send letter to join process for an Overnight pilot
- Summer 2017: Separated into Early Morning and Late Night
- June 2017: RFI released for Late-Night
- July 2017: Presented Early Morning proposal and results of Late Night RFI
- August 2017: Early Morning approved, FMCB asked for proposal on MBTA-operated Late Night

Overnight Proposals

Early Morning and Late Night

- Early Morning pilot will start April 2018
- Earlier service/additional trips on 10 routes mostly in the 4-5am time period
- Marketing effort for entire Early Morning Network
- Late Night proposal to operate between the end of regular service and start of Early Morning
- Overnight Sponsors
 - City of Boston
 - Transit Matters
 - City of Cambridge
 - City Somerville
 - City of Chelsea
 - City of Revere

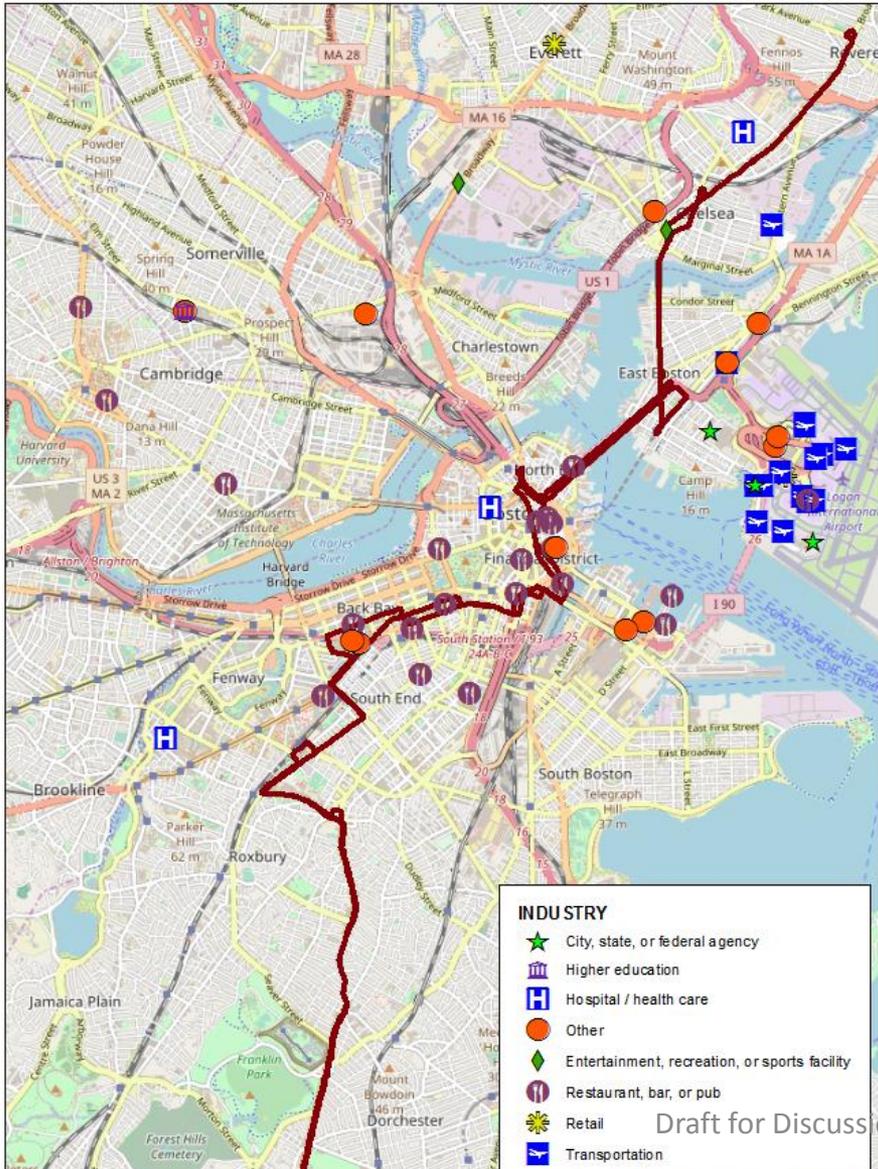
Proposed Late Night Route



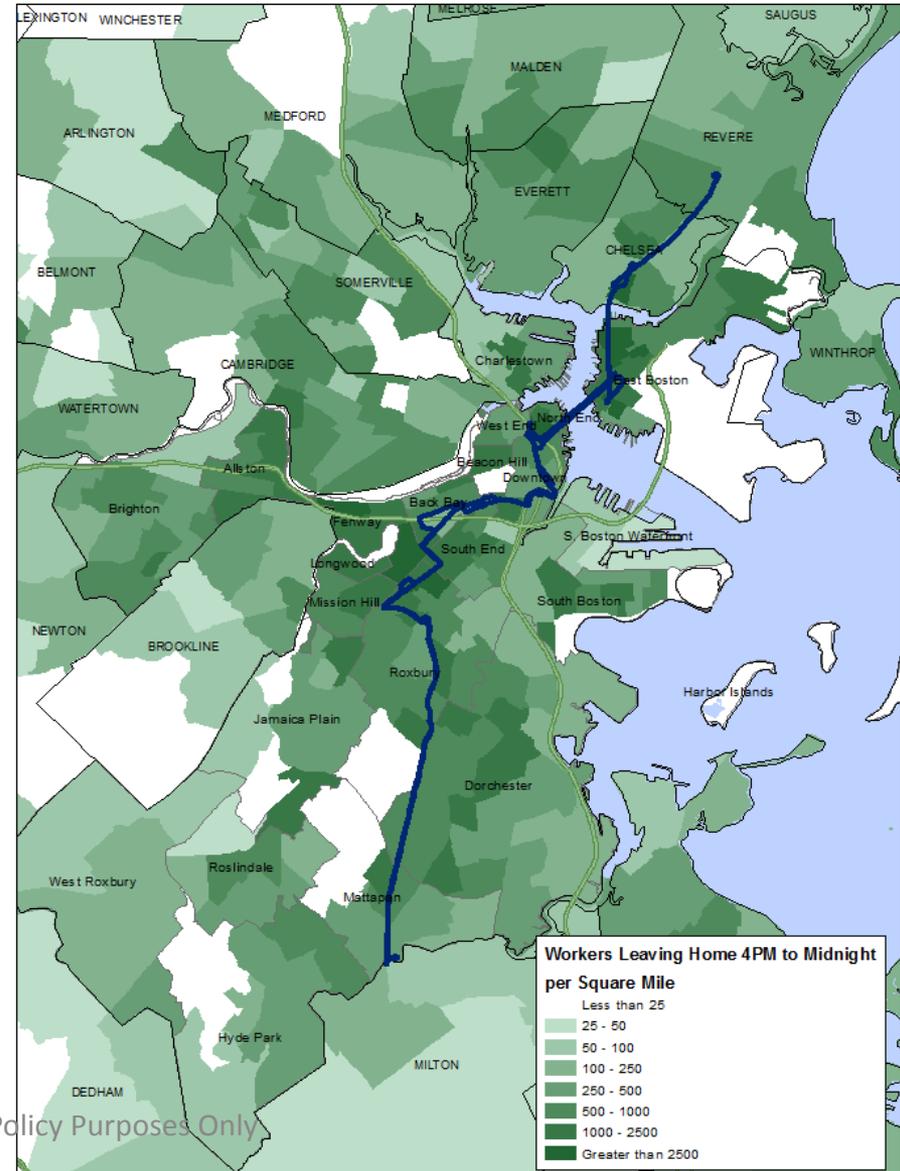
- Follows the 117 from Chelsea and East Boston into downtown
- Through downtown and Back Bay
- Follows the 28 to Mattapan
- Mid-point at South Station
- 150,000 people living within ¼ mile of stop
- 47.3% in zero vehicle households
- 65% minorities

Late Night Job Centers and Commuting Patterns

Proposed Route and Businesses Responding to Late Night Survey



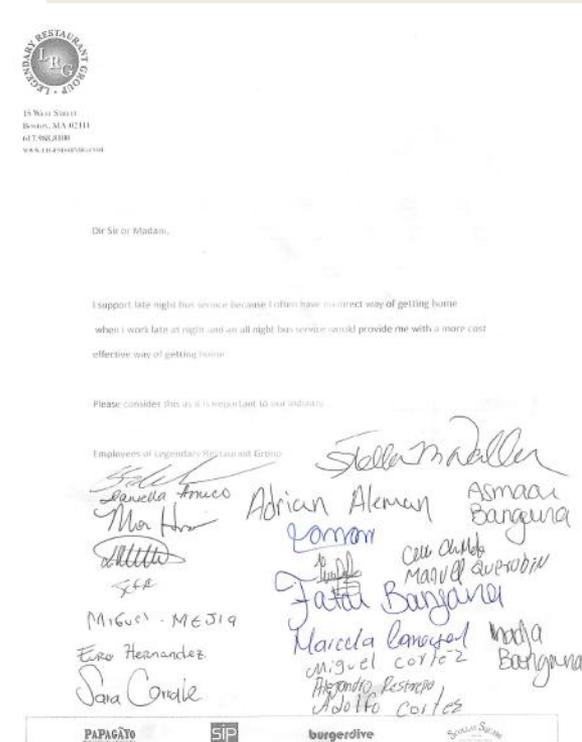
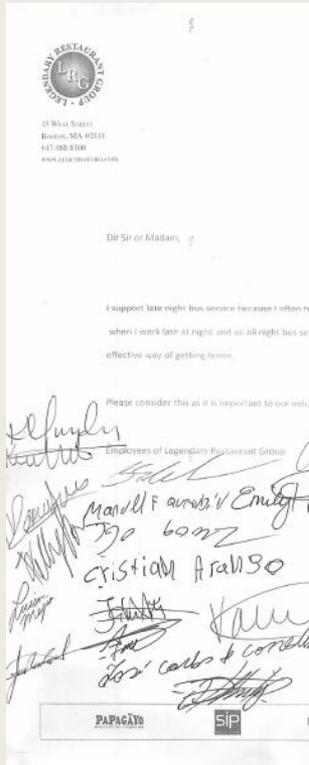
Density of Residents Commuting to Work in Evening (potentially returning overnight)



Draft for Discussion & Policy Purposes Only

Letters of Support for Late Night

Back Bay, Beacon Hill, Downtown, Fenway, South Boston, and East Boston have 322 establishments with liquor licenses allowing them to operate until 2am that have workers unable to take public transit when they leave work.



Food service workers represent 11% of workers arriving at work between midnight and 5:30 am, and 13% of workers arriving to work between 4 pm and midnight.

Late Night Operating Characteristics

- Assuming start date of July 2018 (first rating of FY19) for a year of service, with an evaluation and decision after 9 months
- 1-4:15am (last trip departs terminals at 3:00am and downtown at 3:35am) with 30 minute headways
- Operates every day of the week
- 6 buses
- 9 bus operators will have to be hired (shifts will include other routes)
- Approximately 35 minutes run-time from each terminal point to the mid-point at South Station
- End point at Mattapan Square provides facilities for operator layover
- Estimated ridership 75,000 passenger trips¹ annually
 - A mixture of new riders and existing riders traveling at a time that is more convenient for them

- The MBTA is required to offer paratransit service during the span of service within $\frac{3}{4}$ miles of fixed routes.
- Currently The RIDE operates from 5am to 1am (with eligible service outside of those hours as requested)
- The RIDE service within a core service area between 1am and 5am would cost an estimated additional \$700,000¹ per year
 - The FMCB allocated an additional \$500,000 as part of the Early Morning pilot
 - Adding Late Night would require an additional \$200,000

1 The RIDE cost is an estimate and would require negotiations with our vendors

- **Annual Service Costs**
 - Bus operations and maintenance: \$1,400,000
 - Bus operations supervision: \$280,000

- **Annual Fixed Costs**
 - The RIDE: estimated at an additional \$200,000¹ for pilot period
 - Additional MBTA police: \$180,000
 - Marketing campaign: \$30,000 (addition to Early Morning marketing budget for translations and print materials)

- **Total annual operating cost: \$2,090,000**

- **The soonest a pilot could start is July 2018**

1 The RIDE cost is an estimate and would require negotiations with our vendors

Revenues and Subsidy

Estimates for Duration of Service Pilot

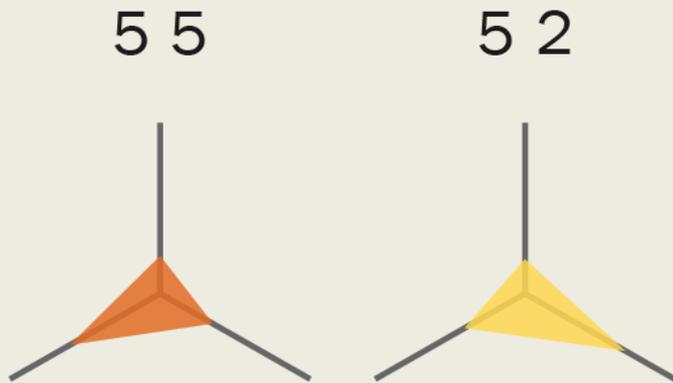
- **Ridership** 75,000 annual trips
 - Average of 206 trips per night
 - Assuming 50% new riders and 50% existing riders
- **Operating Revenues:** \$37,875
 - the average bus rider fare is \$1.01
- **Net Operating Costs:** \$2,052,125
- **Subsidy/Trip** (including fixed costs): \$27
- **Subsidy/Trip** (not including fixed costs): \$22

Comparison of Riders per Service Hour

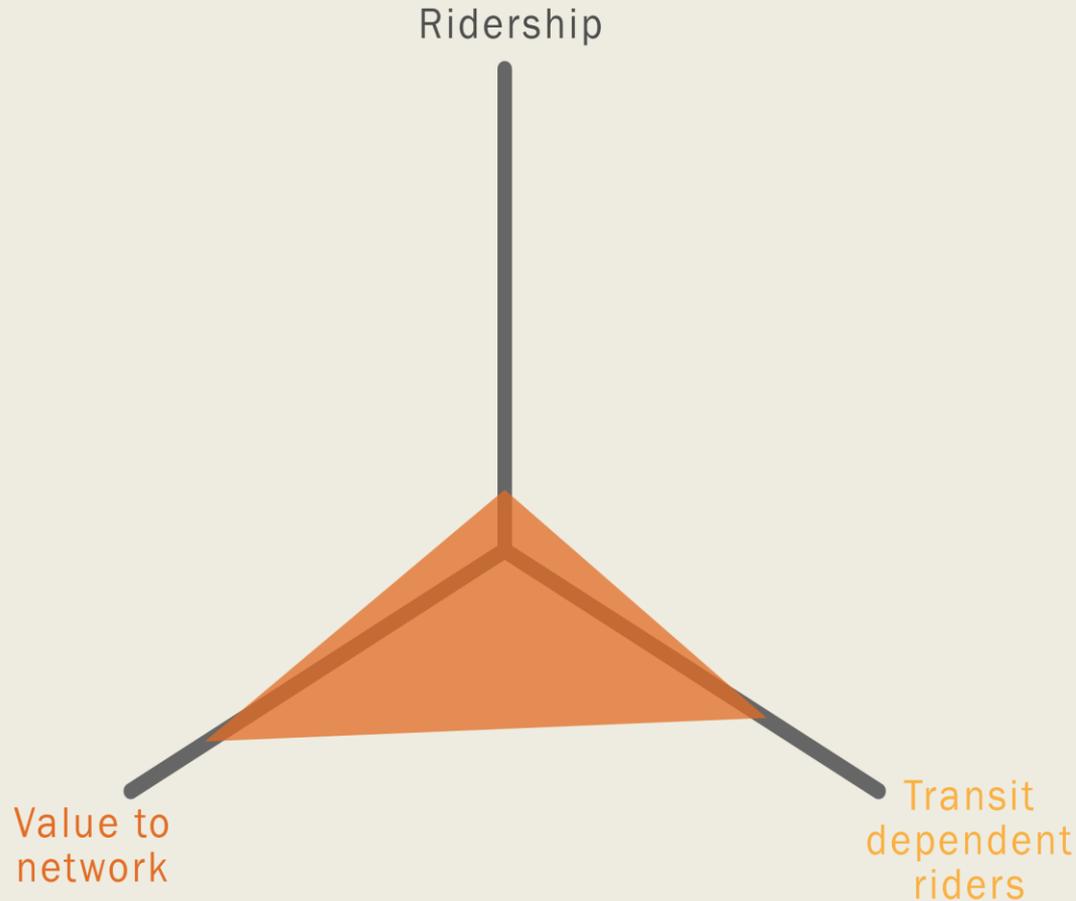
The Late Night projected to average 15 riders per service hour

Similar riders per service hour **during the midday time** period on routes 55 and 52

Estimated Late Night Route Benefits



- Routes with high transit dependent and value to network benefits



- Late Night projected to have a subsidy per trip of \$22
- Similar service (Routes 52 and 55 in midday) have an average cost of \$15 and \$13 per passenger trip
- Overnight has a higher cost per passenger due to 'night run premium' to operators
- For context, subsidy per trip
 - Early Morning pilot projected at \$7
 - Bus System-wide \$2.71 (FY16)
- Previous Late Night (bus and rail combined) subsidy of \$13 per passenger trip
- Prior Late Night was very different:
 - Included rail as well as bus
 - Was only 2 nights a week instead of 7
 - Didn't run all night

- Late Night is not projected to require any capital investments
 - Service would be provided with existing MBTA buses, no additional buses required
 - Cost includes \$480,000 annually spent on maintenance labor and materials due to 77,000 additional miles a year
- It should not have impacts on other MBTA services, outside the expansion of The Ride service

Performance Metrics

To be evaluated during Service Pilot

- **Ridership target** of 75,000 annual riders
- **Data will be collected and evaluated throughout the Service Pilot,** with regular reporting to FMCB on performance metrics:
 - Ridership
 - Cost-Efficiency of the service using a modified version of the cost-efficiency tool in the Service Delivery Policy
- Pilot sponsors will work with the MBTA to conduct a survey during the pilot to determine:
 - Ridership demographics
 - Trip purpose
 - How people were making the trip previously
 - Survey of late-night businesses about benefits

Comparison to Policy Elements

Policy element	Late Night Proposal
Projected operating subsidy per trip comparable to most similar existing service	Subsidy of \$22 compared to \$13-15 on similar services
Capital expenditure and source	No capital expenditure required
Ridership target	75,000 annual riders
Projected revenue	\$37,875
Proportion of anticipated low-income and/or minority riders	Projected to be high proportion of both
Performance measures	Ridership, bus cost-efficiency measure

- Does the proposed Late Night Service Pilot meet the adopted Pilot Service Policy?
- Does the proposed pilot raise any operational concerns?
 - With use of MBTA equipment/hiring of additional drivers?
 - 24 hour operation of The RIDE?
- Should additional revenue sources be explored to support the pilot?